

EPA Region 2 Comments on the Drinking Water Action Plan (DWAP) and Lead and Copper Rule (LCR) White Paper

Major Points:

Region 2 supports the issuance of a Drinking Water Action Plan but recommends that the draft plan be revised to be more “action” oriented and not merely propose processes and frameworks. With that goal in mind, the following actions should be included, with specific timelines for implementation:

1. **EPA should promptly make a regulatory determination to develop national primary drinking water regulations for PFOA and PFOS and set an expeditious schedule for proposing and finalizing those standards.** The need for such standards is demonstrated by EPA’s May 2016 health advisories for PFOA and PFOS; the UCMR 3 data regarding the incidence of these chemicals in public water systems, as well as other sampling data; recent developments in a number of communities, where the public water supply was found to be contaminated with or threatened by one or both of these chemicals; recent reports and decisions by other government bodies; and other factors.

The Safe Drinking Water Act states that the Administrator shall promulgate a national primary drinking water regulation for a contaminant if the Administrator determines that:

- (i) the contaminant may have an adverse effect on the health of persons;
- (ii) the contaminant is known to occur or there is a substantial likelihood that the contaminant will occur in public water systems with a frequency and at levels of public health concern; and
- (iii) in the sole judgment of the Administrator, regulation of such contaminant presents a meaningful opportunity for health risk reduction for persons served by public water systems.

It is clear from EPA’s May 2016 health advisories for PFOA and PFOS and the accompanying health effects support documents that the first criterion above is satisfied. EPA’s health advisories are based on the best available peer-reviewed studies of the effects of PFOA and PFOS on laboratory animals and were also informed by epidemiological studies of human populations that have been exposed to perfluoroalkyl substances. These studies indicate that exposure to PFOA and PFOS over certain levels may result in adverse health effects, including developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations), cancer (e.g., testicular, kidney), liver effects (e.g., tissue damage), immune effects (e.g., antibody production and immunity), thyroid effects and other effects (e.g., cholesterol changes).

The UCMR 3 sampling program found that at least 59 public water systems, collectively serving *millions* of users, had PFOA and/or PFOS levels above the May 2016 health advisory level of 70 parts per trillion. This alone demonstrates that the second criterion listed above is met. In addition, PFOA has been found above 70 ppt in a number of small water systems that were sampled outside of the UCMR 3 program. These systems include the ones in Hoosick Falls, NY and Petersburg, NY. As more sampling is done around the country, additional impacted systems are being found. Recent water sampling done by DOD and others in the

vicinity of military bases, airports and other facilities where AFFF fire retardant foam was used has found significant levels of PFOS and other perfluorinated chemicals in a number of locations – including at several federal facilities in Region 2 alone, such as at Joint Base/McGuire-Dix-Lakehurst in New Jersey. Given the very large number of industrial, commercial, governmental and other facilities where PFOA or PFOS was used around the United States, the extreme persistence of these chemicals in the environment, the exceedingly low health advisory level for these chemicals (70 ppt), and the significant cost of treating drinking water supplies to remove PFOA and PFOS, we expect that this problem is going to continue to be significant and may impact the drinking water supplies of millions of Americans.

A PFOA blood sampling program conducted in Hoosick Falls, NY by the New York State Department of Health in 2016 found that the geometric mean PFOA level in the blood serum of the tested individuals who had been using the Village's water supply was 55 micrograms per liter, which is about 28 times higher than the average in the general U.S. population.¹ Hundreds of Hoosick Falls residents were found to have PFOA blood serum levels greater than 100 micrograms per liter.

For all the reasons discussed above, establishing national enforceable drinking water standards for PFOA and PFOS would clearly present “a meaningful opportunity for health risk reduction for persons served by public water systems,” and thus the third criterion listed above is met.

A number of other recent actions by governmental bodies (or scientific groups advising governments) have highlighted the toxicity of these chemicals as well. These actions include: 1) the Persistent Organic Pollutants Review Committee of the Stockholm Convention met in September 2016 and decided that PFOA, its salts, and PFOA-related compounds are likely to lead to significant adverse human health and environmental effects such that global action is warranted.² 2) A study published in June 2016 under the National Toxicology Program³ concluded that both PFOA and PFOS are “presumed to be an immune hazard to humans.” 3) In September 2016, the New Jersey Drinking Water Quality Institute, which advises the NJ Dept. of Environmental Protection, recommended that the state adopt an MCL of 14 parts per trillion for PFOA.⁴ 4) On September 16, 2016, the California EPA announced that it intends to list PFOA and PFOS as “known to the state to cause reproductive toxicity under the Safe Drinking Water and Toxic Enforcement Act of 1986.”⁵

We also recommend that HQ prioritize the completion of toxicity studies of other chemicals in the PFAS family of compounds, such as Perfluorononanoic acid (PFNA), which is a contaminant of concern in drinking water supplies in a number of communities in New Jersey.”

¹ See <http://www.health.ny.gov/environmental/investigations/hoosick/docs/infosheetgrouplong.pdf>.

² See <http://www.iisd.ca/download/pdf/enb15240e.pdf>

³ See http://ntp.niehs.nih.gov/ntp/about_ntp/monopeerrvw/2016/july/draftsystematicreviewimmunotoxicity_associatedpfoa_pfes_508.pdf.

⁴ See <http://www.nj.gov/dep/watersupply/pdf/pfoa-hb--mcl-public-review-draftwithappendices.pdf>.

⁵ See <http://oehha.ca.gov/proposition-65/cnr/notice-intent-list-perfluorooctanoic-acid-pfoa-and-perfluorooctane-sulfonate>.

In addition, the near term proposal to create a *Framework for Prioritizing Regulatory Action and Promoting Multi-Contaminant Regulatory Approaches* is very weak. Given that it says in the draft plan that the multi-step process called for by SDWA in order for EPA to develop a National Primary Drinking Water Regulation (NPDWR) “can require many years to complete, and to date, EPA has not regulated any new contaminants through this process,” isn’t that a major problem that needs to be squarely addressed? If the problem is the statute itself, then EPA could do a better job to explain to its stakeholders exactly how the statute makes the process of developing a new NPDWR so difficult and time consuming and that this is why the agency has been unable to issue any new NPDWR’s in 20 years. This could lead to statutory reform. (See, e.g., what occurred with TSCA.) If the problem is not only due to the statute but also the way in which EPA chooses to implement the statute, then that should be examined closely, in collaboration with National Drinking Water Advisory Council (NDWAC).

2. It is clear from recent events and the almost daily discovery of new compounds in our drinking water, that our existing source water and ground water protection programs are not enough to keep contaminants out of drinking water. Given that there are 85,000 plus chemical compounds in use today and that we only monitor on a regular basis for the 90 plus compounds that have MCLs (we should also require monitoring for the over 200 plus compounds that have Health Advisories), **we need to shift the paradigm on how we identify and treat unregulated compounds in public water systems.** Our new approach should include:
 - a. placing all unregulated contaminants in surface water and groundwater under the Emergency Planning and Community Right-to-know Act (EPCRA). This would supplement authorities that exist in RCRA, TSCA, and reporting in TRI to require companies to (i) report additional contaminants not covered in existing laws and regulations, (ii) sample groundwater and surface water on their properties for all compounds in use at the facility and (iii) make all of this information available to the public. The primacy agency, working with stakeholders, should then use this information to identify public water systems at risk from unregulated contaminants and actions the systems should take to protect the people who drink their water (e.g., additional monitoring and/or treatment).
 - b. establishing a program to evaluate potential contamination to drinking water at the community/public water system level (think of it as a drinking watershed). This would include analyzing RCRA, TSCA, Superfund, Air, and Water databases/sites/permits to develop a list of contaminants of concern in the public water system. The list can be used to determine what, if any, types of filtration may be needed to protect the public water system from exposure. DWSRF funds could be used to support installation of the filtration system.

To the extent these approaches would require a statutory change, the agency should immediately take action on what we can do now, and begin discussions with our key drinking water stakeholders – including the Association of State Drinking Water Administrators – about such a new paradigm, so as to build support for it.

3. **The plan should reflect the need for a national commitment to seek additional resources.** Many of these proposals cannot move forward without additional resources (both to EPA and to the States through Public Water Supply Supervision grants). As the national conversation focuses on upgrading roads and bridges it is imperative that EPA educate policy makers and the public on the significant funding needs to upgrade the U.S. water and wastewater infrastructure. The plan references the 2011 Drinking Water Needs Survey which identified \$385 billion in estimated construction cost needs for the nation's drinking water projects over the next 20 years (65% for distribution systems, 20% for treatment 15% for other needs; including intake structures, wells, spring collectors, and storage). However, as policy makers, elected officials, and those running for office, debate the best path forward to address all infrastructure needs, we should clearly articulate the drinking water funding needs and highlight the relationship between drinking water quality and upgrading the infrastructure.
4. **LCR White Paper: The LCR White Paper is a list of good ideas and proposals; however, the White Paper must also include a clear roadmap as to how and when they will be translated into enforceable regulations and actions.** Consistent with Region 5's comments, we recommend that OW develop and issue an expeditious schedule, with interim and final dates, showing when the LCR revisions will be completed. As alluded to in the white paper, the implementation of the current regulation is dependent upon multiple decision points. A missed, delayed or incorrect decision has a real impact on rule progression. It is critical that any revision to the regulation clearly establish treatment objectives, performance standards to measure whether objectives have been met and deadlines for any rule requirement.

Additional Points:

1. The importance of our enforcement tools must be highlighted in this plan.
2. We suggest a LEAN exercise to evaluate how to make our existing frameworks work better.
3. Each section should clearly articulate the problem, the remedy, and the desired outcome.
4. Include specific mechanisms for coordination with primacy agencies, tribes, the public, and other stakeholders. Provide for public input early and often.
5. Define length of time for near to medium term actions in each case.

Specific Comments for Consideration:

I. Introduction

- Suggest changing the title from DWAP to Drinking Water Improvement Strategy (DWIS) to more accurately reflect the strategic nature of the document.
- Replace *U. S. Drinking Water System* with U.S. Drinking Water Systems

- Replace *civil society* with general public
- Replace: *This Drinking Water Action plan is a national call to action, urging all levels of government, utilities and other key stakeholders to work together – to re-energize the safe drinking water enterprise in response to this moment of opportunity.*

With:

This Drinking Water Action Plan is a national call to action, urging all levels of government, utilities and other key stakeholders to work together – to ensure delivery of and access to safe drinking water.

- Add another action area -- Enforcement of Drinking Water Regulations – or Action Area 1 should be reworked so that it explicitly includes enforcement as a major element. Currently, there is only a passing mention of the DW Enforcement Response Policy on page 6 below.
- Suggest adding information on how we work with tribes that don't have primacy, to explain the unique relationship and our role.

II. Taking Action – Elements of the National Safe Drinking Water Action Plan

a) Action Area 1: Next Generation Oversight for Safe Drinking Water Act

- In addition to “next generation” oversight, the action plan should make it clear that traditional oversight by EPA of primacy agencies and of the water systems themselves is essential. This has become evident through our own inspections, as well as our more recent intensive on-site reviews at water systems for LCR compliance. The rule requirements are complicated and we have consistently found violations that have been missed by the state. Unless the rules change the only way to find these violations is on site. Also, states and EPA need more resources to perform Comprehensive Sanitary Surveys. The solution or action in this case is to revise the LCR. EPA should also commit to strengthening internal oversight, specifically better coordination between OECA and OW, and possibly reorganize EPA drinking water oversight.
- Replace: *Under SDWA, EPA authorizes Primacy agencies to assume primary enforcement responsibility, also called primacy, for regulation of public water systems to states, territories, and Indian Tribes if they meet certain requirements.*

With: *Under SDWA, EPA authorizes primacy agencies to assume primary enforcement responsibility, also called primacy, for regulation of public water systems. The primacy agencies are states, territories, and Indian Tribes if they meet certain requirements.*

- Add a sentence indicating that a number of states are lagging in adopting drinking water program revisions to incorporate new or revised EPA drinking water regulations, and as a result, EPA retains primacy for enforcing some drinking water regulations even in many states that

otherwise have primacy. New Jersey incorporates by reference, which is something that should be encouraged for other primacy agencies.

- National E-Reporting Rule and Data Systems to Support Electronic Reporting for SDWA is a good idea and technical assistance should be provided to small water systems. We have seen that small NPDES permittees are having problems with electronic reporting and small water systems have much less capacity. The focus should be on getting the labs involved and there needs to be an overall focus on small water system consolidation for any of this to work in the long term. New Jersey's "Drinking Water Watch" web site is one model for transparency and public data availability.
- Please provide an update for the launch of SDWIS Prime.
- Establish a schedule and requiring annual on-site review (including a component to evaluate if the data reported in SDWIS is accurate) of each primacy agency for a given drinking water rule instead of a *Triennial, Publicly Released EPA Reviews of Primacy Agencies' Programs*. Many problems detected with implementation of one rule (reporting is a good example) are also problems with other rules. Waiting three years allows for problems to fester. The results of the annual on-site reviews should be released to the public. Region 2 has effectively used enhanced oversight and comprehensive sanitary surveys to identify and highlight implementation issues that would not be uncovered during a typical rule based file review. Examples include turbidity recording ranges, UV permitting issues, disinfection calculations, and lead and copper sample siting.
- Build on Existing Oversight Tools through Development of Priority Indicators:
The plan states *Indicators may also be used to identify systems in violation*. EPA already uses violations as indicators. What sort of indicators are being considered here?
- *Integrate Public Health Surveillance Data with Drinking Water Quality Information*: use other public health surveillance data beyond blood lead levels. While under reporting is a known factor, it may provide insight to look at cryptosporidiosis and giardiasis reported versus public water supply.

b) Action Area 2: Strengthen Transparency, Public Information, and Risk Communication

- Web Portal on the State of the Nation's Drinking Water: Where you discuss *develop indicators of drinking water quality*, with respect to regulated contaminants that have MCLs, does there need to be any indicator of drinking water quality other than simply the MCL itself? What is being contemplated here?

- Add education to the title of Action Area 2.
 - Action Area 2: Strengthen Transparency, Public Information, and Risk Communication. Is there are any plans to provide information in Spanish and other languages? The concern is that language will be a barrier in the protection of public health for some environmental justice communities and minorities.
 -
- c) Action Area 3: Proactive Strategy to Address Unregulated Contaminants and Source Water Vulnerability
- The plan states *This prioritization framework would assist EPA and our partners with most efficiently targeting limited resources to address the most significant emerging risks to the safety of local drinking water supplies.* Please include that, wherever possible, a health advisory should be established prior to placing a compound on the UCMR list. There should be a direct path to promulgating an MCL based upon the UCMR data. Other available data should be considered when evaluating setting an MCL based upon the UCMR data, especially for small systems, which may have more contamination than the UCMR data alone suggests. Another option is to consider a default level based on chemical groups.
 - Work with Primacy agencies and Stakeholders to Strengthen the Health Advisory Program: The plan states *public messaging to support local communities with developing risk management strategies to address emerging contaminants impacting their water supply.* This clause is vague and so it is difficult to know what is actually being contemplated here.
 - Framework for Local Management of Unregulated Contaminant Risks at Individual Drinking Water Systems, Including Through Source Water Protection: The plan states *a framework to help guide utilities and primacy agency and local regulatory officials in proactively assessing and managing risks from unregulated contaminants.* This is vague and so it is hard to know what might be meant. It would be better if examples can be provided. One action that could be important would be for EPA to work closely with the primacy agencies to develop targeted sampling plans – i.e., beyond the UCMR program -- to identify water systems that may be impacted by particular unregulated contaminants. This will require close collaboration and sharing of information regarding the unregulated contaminants and the types of locations where they are most likely to be present in drinking water supplies. Some states have already started doing this with regard to PFCs – as has DOD with respect to PFOS – and this can be a model for other states and other unregulated contaminants. Thousands of hours have been devoted to the source water protection program without any correlation or targeting – that information should be taken into account and water systems should develop area specific monitoring strategies

- One of the proposed actions in the plan states *Develop Tools to Assess Comparative Costs for Source Water Protection and Broad-Spectrum Treatment Technologies*: However, the narrative states that the plan will *identify and enhance available tools* it doesn't say anything about developing. Also, there are numerous tool kits available online. Provide a summary and/or links to the most effective existing tools?
- Action Area 3: Proactive Strategy to Address Unregulated Contaminants and Source Water Vulnerability: While the proposed actions established in the plan are implemented, there is a need to ensure that emergency action plans (including alerting consumers and provision of alternate sources of water) include emerging contaminants and that these action plans are implemented in a very short time (i.e. days or hours) after learning of contamination of drinking water sources.
-
- d) Action Area 4: Promote Equity and Build Capacity for Water Infrastructure Financing and Management in Low-Income, Small, and Environmental Justice Communities
 - Under Proposed Actions, Additional Opportunities, please add section c: Promote no or low interest loans for lead service replacement: EPA proposes to work with states to develop a program whereby municipalities and/or drinking water purveyors get SRF dollars from the states to provide no or low interest loans to customers to pay for residential lead service line replacement, fixture replacement (including installation of low flow fixtures), and appliances.
- e) Action Area 5: Reducing Lead Risks through the Lead and Copper Rule:
 - The action here is rule revision to reduce the risks from lead and copper. Suggest adding that into the title.
 - *The paragraph stating: EPA is actively working on revisions to the LCR and expects to issue a proposed rule in 2017. Given the 3-year window prior to implementation of new and revised drinking water rules, EPA, primacy agencies and local communities will be implementing the existing LCR for at least the next 5 years, and there is an immediate need to strengthen implementation by primacy agencies and the nation's drinking water systems. EPA and the primacy agencies will initiate enforcement actions, as appropriate, where there is evidence of treatment technique violations. Should be revised to read as follows: EPA is actively working on revisions to the LCR and expects to issue a proposed rule in 2017. Given the 3-year window prior to implementation of new and revised drinking water rules (unless the Administrator determines that quicker implementation is practicable), EPA, primacy agencies and local communities may be implementing the existing LCR for about 5 more years. There is an immediate need to strengthen implementation of the existing rule by primacy agencies and the nation's drinking water systems.*

EPA and the primacy agencies should initiate enforcement actions wherever appropriate, when there is evidence of violations of the LCR.

- In response to the paragraph that states that *as part of EPA's increased oversight of the implementation of the LCR, EPA sent letters on February 29, 2016, to primacy agencies under SDWA to ensure consistency with EPA regulations and guidance. The letter requested that primacy agencies work collaboratively with EPA to address deficiencies and improve transparency and public information regarding the implementation of the rule. Every primacy agency responded in writing to EPA. Virtually every response expressly confirmed that protocols and procedures are fully consistent with LCR and applicable EPA guidance, including protocols and procedures for optimizing corrosion control.* In Region 2 we have found issues during on site reviews that cannot be found unless you are at the water system or primacy agency. That is our definition of enhanced oversight. Simply sending the letters to states and getting the states' responses about how they are implementing the rule is not enhanced oversight. We suggest bolstering this paragraph to include the follow up from the regions and that corrective actions have been requested, where necessary.
- The section Current LCR implementation, 1. Near-Term Actions, a. Enhanced Oversight Activities: should be modified to: 1. Near-Term Actions, a. Enhanced Oversight and Enforcement Activities: Language should be added to item 1.a., calling for a robust enforcement and compliance effort focused on the LCR. In Region 2, we prepared such a strategy in February 2016 and have been implementing it and can provide a copy to HQ. Our strategy includes, among other things, doing in-depth on-site file reviews and/or sending information request letters to individual water systems to identify any noncompliance with the LCR, and then – if the state agency does not act within a certain number of days – initiating an EPA enforcement action.
- Technical Support Documents, Training and Assistance: Region 2 has found numerous inconsistencies in the implementation guidance documents for this rule that are available on line – in addition to creating new documents, there needs to be an effort to assure the accuracy of some of the older documents
- With respect to the section on LCR Revisions, the bullet entitled “Clear and Enforceable Requirements” is the most important one. The rule is too dependent upon the decision points, and missing any one can really impact its implementation

III. Conclusion – Integration and Broader Context

- Spell out acronyms

- Resources: The plan should include a commitment from EPA to provide additional resources (FTEs and funds) for implementation. We're also aware of the need for resources at the state and local level to implement the current safe drinking water program, let alone additional tasks. However, the plan makes no mention of the need for additional Public Water System Supervision (PWSS) grants for primacy agencies, which have been flat or declining for several years.

Region 2 Specific Comments on the LCR White Paper:

- a. Page 4: Please clarify the recommendation that Systems serving less than 50,000 people that had not yet installed corrosion control treatment must begin working with their state to monitor water quality parameters and install and maintain corrosion control treatment (CCT)
- b. Page 4: Any system that exceeds the action level after installing corrosion control treatment must conduct public education, and lead service line replacement (LSLR). This sentence should be clarified. Any system exceeding the action level for lead (at any time of the rule implementation) is required to conduct public education, and is not limited to after installing corrosion control treatment.
- c. Page 5: "Establish appropriate compliance and enforcement mechanisms. " Please include appropriate oversight mechanisms?
- d. Page 6: "The current LCR requires lead service line replacement (LSLR) only after a lead action level exceedance..." Clarify: after a lead action level exceedance for those systems that have already installed CCT.
- e. Page 8. "Requiring drinking water utilities to update their distribution system materials inventory to identify the number and location of lead services lines in their systems." Region 2 recommends expanding this requirement to also include partial lead service lines. Additionally, based on our focused LCR audits at water systems in Region 2 we have found the materials inventory to be lacking and agree that updating is necessary. The information is useful for lead service line replacements but equally important for sample siting. Adding a transparency component would also allow regulators and the public to confirm tap samples are being taken at highest risk locations.
- f. Pages 11-12. Increased Transparency and Information Sharing and Public Education Requirements. As with everything, knowledge is power. Knowledge is particularly important in the context of the LCR where there is a shared responsibility between the water systems and customers. Region 2 recommends that the regulation modification also re-evaluate effectiveness of the current required language of the Consumer Confidence Report, Public Notice and LCR Public Education. Much of the mandatory language is "EPA speak" and often results in notices that are lengthy and likely not read in their entirety by the consumer.